

Abstract

Backlight luminance sensors 111A to 111D are disposed in the vicinity of four outer corners of an effective screen of an LCD panel 121. Each of the 5 backlight luminance sensors 111A to 111D detects the luminance of each of three primary colors. A backlight unit is composed of a three-primary LED array and a light diffusion unit. Transistors of the backlight luminance sensors and transistors of a pixel portion are formed on the same substrate in the same process. 10 When a transistor is irradiated with backlight in its sufficient off region, an off current occurs due to light excitation. Since the value of the off current corresponds to the luminance of the rays of backlight that irradiates the transistor, the luminance of the 15 backlight is detected with an output voltage into which the off current is converted. As a result, the luminance of the backlight is kept constant.

20